

## ABSTRACT

An optical waveguide chip 1 comprises a core portion 6 as an optical waveguide, a clad portion 3 composed of a lower clad layer 4 and an upper clad layer 5, and an optical fiber guide portion 7 which is formed integrally with the clad portion 3 for positioning a single-mode optical fiber which is to be connected with the core portion 6. Each portion of the optical waveguide chip 1 is formed by creating a layer of a radiation-sensitive polysiloxane composition by photolithography. At least two kinds of radiation-sensitive polysiloxane compositions are used so that the core portion 6 have a higher refractive index than the clad portion 3.